

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

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DATE: 13 DEC 1982

SUBJECT: ~~Representation of Granite City Lead Program~~

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FILE

On November 22, 1982, a high-level team from Illinois EPA made a presentation on the lead pollution problem in the Granite City area associated with the lead smelting operations that existed in that location for several years. Also present at the meeting were Chris Wiant and Sue Ramirez of the Illinois Department of Public Health (IDPH) Environmental Toxicology Program.

Illinois EPA was represented by Richard Carlson, Director; Delbert Haschmeyer; Roger Kanerva; Bernie Killian; Bob Sharpe and Tom Bierma.

USEPA was presented by Alan Levin, Deputy RA; David Kee, AMD Director; Bill Constantelos, WMD Director; Charles Sutfin, WD Director, Bill Sanders, ESD Director and members of their staff.

After opening remarks by Alan Levin and Richard Carlson, Tom Bierma IEPA Air Toxics Program Coordinator, proceeded with the presentation. Chris Wiant, IDPH, presented preliminary results of health studies conducted to date by the State. Discussion followed the presentations and subsequent discussions were as follows:

I. IEPA has been unable to determine the causes of the high ambient lead concentrations monitored in the area during the 4th quarter of 1981.

II. Stationary Sources

a. Taracorp

This company purchased the facility in 1979 from NL Industries the previous owners and operators. Taracorp has filed a Chapter 11 Bankruptcy, but is operating and hopes to continue to operate. There are several buildings at the site. Operations include breaking down of old lead batteries, blast furnace smelting of lead, tapping and pouring into lead ingots. Some of the lead ingots are shipped out while others are used in the processing of various products such as, lead shot, powered lead, solder alloy, auto parts, other alloys, etc.

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In spite of several field inspections, IEPA personnel have not observed the plant during operation of the blast furnace. Although key emission points are controlled by baghouses, it is not known to what extent any emissions from the plant may be playing in the overall emission picture.

b) St. Louis Lead Recyclers

This company is a satellite of Taracorp, but has shut down effective October 1, 1982. They used to take material off the waste pile to recover lead, plastics and hard rubber. Some of the hard rubber was ground into bits and spread over the parking lot. Whether and to what extent there may be reintrainment from the parking lot is not known.

c) Tri City Trucking

This firm uses a building and parking area adjacent to the Taracorp facility. Reintrainment from vehicular traffic is considered a lead source.

d) Waste Piles

The waste pile has been assumulating over many years. It covers 3 acres and is about 25 feet high. It is not known how deep the pile is. The pile contains quite a few drums. A few that were opened were found to contain caustic soda. IEPA is trying to determine from Taracorp and the previous owners the nature of any hazardous materials that may be contained in the waste pile.

Again IEPA has not determined to what extent fugitive emissions from the waste piles has contributed to the violation of the lead standard. Concentrations of lead in the waste pile and hard rubber have been measured at around 400 ppm.

e) Surface Soils

Loose surface soil or dust taken from areas where reintrainment is likely, showed lead concentrations of 30% near the waste pile and near the Taracorp gate. The North truck lot showed 1.2% lead and the South truck lot 7.5% lead.

III. Other Sources of Lead Poisoning

a) Water

The ground water table is only 7' to 10' below the surface, but the extent of water contamination if any is not known. Preliminary tests indicate no severe contamination. Residents however obtain their drinking water from the Mississippi River.

b) Play Areas

Samples from exposed soil in areas where children may play is being evaluated.

c) Gardens

Both garden produce and garden soils in exposed areas show significant higher concentrations of lead than from similar control samples.

IV. Studies

The IEPA study program is also studying exposure of the population to lead poisoning from all sources including air, soil, work and home, groundwater, drinking water, and food from their gardens.

Studies Include:

EP toxicity, reentrainment, soil, garden, groundwater, blood-level and birth defects. Preliminary study results have failed to show any adverse health effects over control areas. There is also apparently very little evidence of citizen concern.

IEPA indicated that they would welcome assistance in evaluating the smelter, the fugitive and reentrainment emission sources, and also the health data being collected.

EPA, Region V ACB is providing contractor assistance for laboratory work on receptor modeling.

After all evaluations are completed by next Spring the State will decide on what remedial actions to take. The State is also looking forward to receipt of EPA's revised Criteria document for lead expected to be available in February 1983.

IEPA has made this Granite City location a high priority area because of its proximity to residential areas of the city.

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